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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,258	11/08/2001	Richard B. Mignogna	80,253	5017
26384	7590 04/14/2003			
NAVAL RESEARCH LABORATORY ASSOCIATE COUNSEL (PATENTS) CODE 1008.2			EXAMINER	
			FAYYAZ, NASHMIYA SAQIB	
4555 OVERLOOK AVENUE, S.W. WASHINGTON, DC 20375-5320			ART UNIT	PAPER NUMBER
			2856	3
		DATE MAILED: 04/14/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

		An,
1	Application No.	Applicant(s)
Office Action Summan	09/986,258	MIGNOGNA ET AL.
Office Action Summary	Examiner	Art Unit
•	Nashmiya S. Fayyaz	2856
The MAILING DATE of this commun Period for Reply	ication appears on the cover she t wi	th the correspondenc address
A SHORTENED STATUTORY PERIOD F THE MAILING DATE OF THIS COMMUN - Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this comm - If the period for reply specified above is less than thirty (3 - If NO period for reply is specified above, the maximum st - Failure to reply within the set or extended period for reply - Any reply received by the Office later than three months a earned patent term adjustment. See 37 CFR 1.704(b). Status	ICATION. s of 37 CFR 1.136(a). In no event, however, may a renunication. 800 days, a reply within the statutory minimum of thirt atutory period will apply and will expire SIX (6) MON's will, by statute, cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. IANDONED (35 U.S.C. § 133).
1) Responsive to communication(s) fi	led on	
2a)☐ This action is FINAL .	2b) This action is non-final.	
	n for allowance except for formal mat tice under <i>Ex parte Quayle</i> , 1935 C.D	
Disposition of Claims		
4) \boxtimes Claim(s) <u>1-6</u> is/are pending in the a		
4a) Of the above claim(s) is/a	re withdrawn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-6</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restrict Application Papers	ction and/or election requirement.	
9)☐ The specification is objected to by the	e Examiner.	
10) The drawing(s) filed on is/are:	a) accepted or b) objected to by the	ne Examiner.
Applicant may not request that any obj	jection to the drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).
11)☐ The proposed drawing correction file	d on is: a)☐ approved b)☐ di	isapproved by the Examiner.
If approved, corrected drawings are re	quired in reply to this Office action.	
12) The oath or declaration is objected to	by the Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim	for foreign priority under 35 U.S.C. §	§ 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority	documents have been received.	
2. Certified copies of the priority	documents have been received in A	pplication No
	of the priority documents have been national Bureau (PCT Rule 17.2(a)). In for a list of the certified copies not	-
14) Acknowledgment is made of a claim f	or domestic priority under 35 U.S.C.	§ 119(e) (to a provisional application).
a) ☐ The translation of the foreign lar	- - ·	
Attachment(s)		
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-1449) Information Disclosure Statement(s) (PTO-1449) 	PTO-948) 5) 🔲 Notice of I	Summary (PTO-413) Paper No(s) nformal Patent Application (PTO-152)
J.S. Patent and Trademark Office PTO-326 (Rev. 04-01)	Office Action Summary	Part of Paper No. 3

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- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP-137504 (Toda et al.).

As to claims 1-6, Toda et al disclose an ultrasonic system/method for measuring thickness of a film 14 on plate 15 by applying an ultrasonic probe 13 to the film and plate and introducing a transmission pulse with low and high frequency components into bodies (15, 14) and reception of echos from the interfaces which is then subjected to Fourier Transform and peaks are obtained and used to determine the thickness of the coating film 14, see Abstract and Fig. 3a. However, it is not recited in the Toda et al that signals include a "back-scattered signal" and a "trailing signal" and where they are discriminated based on a time delay. However, it is indicated that a "surface echo" or "underside echo" is subjected to the FFT. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to determine that the surface or underside echo as the signal of interest based upon the configuration of the fluid coating substrate interface and thereby determine which signal to analyze as the "trailing signal". As to claim 2 Toda et al obtain 2 peaks and use one of the peaks to normalize the other of the peaks. As to claim 3, usage of the velocity along with the resonant frequency is well-known for determining

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the thickness and therefore would have been obvious to one of ordinary skill in the art at the time of the invention as old and well-known.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, in step e, it is unclear what "the frequency" is referring to. It should be indicated that it is of the set of frequencies of the returning trailing signal. In claim 2, on line 3, "the front surface" and on line 6 "the main transmitting frequency" lack antecedent basis. On line 4, "it" is unclear. In claim 3, is the "resonant frequency" different from that of claim 1, step e? On line 3, "the resonant frequency" lacks clear antecedent basis. In claim 4, there is no reference to FFT and therefore it is unclear how an amplitude of each "frequency component" is determined.

4. Any inquiry concerning this communication should be directed to N. Fayyaz at telephone number 305-4891.

Fayyaz/ek

03/27/03

HEZRON WILLIAMS
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